

1. A flashlight extension that is flexible, comprising:

a body having first and second end fittings separated by a length distance, said body comprising;

a first member, forming an electrically conductive core having a memory to

5 elastically deform under small bending displacements, and plastic properties to substantially hold a deformed shape subsequent to large bending displacements;

a second member, forming a substantially nonconductive and cylindrical barrier disposed generally concentrically with said first member;

10 a third member, forming a conductive element, and being electrically isolated from said first member, and being spaced radially from said first member by said second member, and further being disposed approximately concentrically with respect to said second member;

a fourth member, disposed radially about said third member, and forming a  
15 protective covering for substantially the entire length of said third member;

said second, third, and fourth members having material properties and cross-sectional dimensions in combination such that deformations of said body are substantially governed by deformations of said first member; with

said first end fitting being affixed to a first end of said body, said first end fitting further  
20 being configured and arranged to interface in a removable and electrically conductive relation with an end of a flashlight; and

said second end fitting being affixed to a second end of said body, said second end fitting further being configured and arranged to interface in a removable and electrically conductive relation with a flashlight head.

5     2.     An apparatus according to claim 1, wherein said first member comprises the primary load carrying member of the body.

3.     An apparatus according to claim 2, wherein said body has an outside diameter in the range from about 0.1 inch to about 0.5 inch.

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4.     An apparatus according to claim 3, wherein said body has a length in the range from about 1 inch to about 36 inches.

15     5.     An apparatus according to claim 4, wherein said first, second, third, and fourth members are substantially concentrically arranged.

6.     An apparatus according to claim 5, wherein said first member comprises a solid metal wire.

20     7.     An apparatus according to claim 5, wherein said first member comprises solid copper wire.

8. An apparatus according to claim 6, wherein said second member comprises plastic-type materials.

9. An apparatus according to claim 8, wherein said third member comprises a plurality  
5 of metal wires.

10. An apparatus according to claim 9, wherein said fourth member comprises plastic-type materials.

10 11. An apparatus according to claim 10, wherein said body comprises RG-11 coaxial cable.

12. An apparatus according to claim 10, further in combination with a flashlight.

3 13. A flashlight extension that is flexible, comprising:

a body having a length between first and second end fittings, said body comprising;

a first member, forming an electrically conductive core having dual elastic/plastic properties and having a first section modulus;

5 a second member, forming a substantially nonconductive barrier disposed generally concentrically with said first member, said second member having a second section modulus;

a third member, forming a conductive element spaced apart radially from said first member by said second member, said third member having a third section modulus;

10 a fourth member forming a protective covering for substantially the entire length of said third member, said fourth member having a fourth section modulus;

said second, third, and fourth members having section moduli in combination such that deformations of said body are substantially governed by deformations of said first member; with

15 said first end fitting being affixed to a first end of said body, said first end fitting further being configured and arranged to interface in a removable and electrically conductive relation with an end of a flashlight; and

said second end fitting being affixed to a second end of said body, said second end fitting further being configured and arranged to interface in a removable and electrically conductive relation with a flashlight head.

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14. An apparatus according to claim 13, wherein said first member comprises the primary load carrying member of the body.

15. An apparatus according to claim 14, wherein said body has an outside diameter in the  
5 range from about 0.1 inch to about 0.5 inch.

16. An apparatus according to claim 15, wherein said body has a length in the range from about 1 inch to about 36 inches.

10 17. An apparatus according to claim 16, wherein said first, second, third, and fourth members are approximately concentrically arranged.

18. An apparatus according to claim 17, wherein said body comprises RG-11 coaxial cable.

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19. An apparatus according to claim 18, further in combination with a flashlight.

20. A flexible flashlight extension comprising:

a body having first and second end fittings separated by a length distance, said body comprising;

a first member, forming an electrically conductive core having a memory to  
5 elastically deform under small bending displacements, and plastic properties  
to substantially hold a deformed shape subsequent to large bending  
displacements;

a second member, forming a substantially nonconductive and cylindrical barrier  
disposed generally concentrically with said first member;

10 a current carrying path from the first end fitting to the second end fitting;

said second member having material properties and a cross-sectional dimension such that  
deformations of said body are substantially governed by deformations of said first  
member; with

said first end fitting being affixed to a first end of said body, said first end fitting further  
15 being configured and arranged to interface in a removable and electrically conductive  
relation with an end of a flashlight; and

said second end fitting being affixed to a second end of said body, said second end fitting  
further being configured and arranged to interface in a removable and electrically  
conductive relation with a flashlight head.

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21. An apparatus according to claim 1, wherein said first member comprises the primary load carrying member of the body.

22. An apparatus according to claim 20, wherein said current carrying path comprises a  
5 third member, forming a conductive element, and being electrically isolated from said first member, and being spaced radially from said first member by said second member, and further being disposed approximately concentrically with respect to said second member, the third member comprising a plurality of metal wires.

10 23. An apparatus according to claim 22, further comprising a fourth member disposed radially about said third member, and forming a protective covering for substantially the entire length of said third member, the fourth member comprising plastic-type materials.

24. An apparatus according to claim 20, wherein said body has an outside diameter in the  
15 range from about 0.1 inch to about 0.5 inch.

25. An apparatus according to claim 24, wherein said body has a length in the range from about 1 inch to about 36 inches.

20 26. An apparatus according to claim 23, wherein said first, second, third, and fourth members are substantially concentrically arranged.

27. An apparatus according to claim 20, wherein said first member comprises a solid metal wire.

28. An apparatus according to claim 20, wherein said first member comprises solid  
5 copper wire.

29. An apparatus according to claim 20, wherein said second member comprises plastic-type materials.